AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A method, comprising:

using an authentication message to signal service selection information via a first network to an authentication server of a second network, the service selection information indicating an access point, wherein the first and second networks are distinct; and

using the service selection information to connect to at least one service provided over the access point indicated by the service selection information,

selecting, using the authentication server, a gateway in the second network to connect to the first network;

wherein the service selection information comprises at least one access point name parameter,

wherein the at least one access point parameter comprises an access point name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the authentication message so that the access point name can be decrypted or read by an access server, and the user name and the password can only be decrypted at a network defined by the access point name.

2.   (Currently Amended) A method according to claim 1, wherein the first network [[is]] comprises a wireless local area network, wherein the second network comprises a cellular packet-switched network different from the first network, and the authentication message comprises an extensible authentication protocol message.

3. (Previously Presented) A method according to claim 1, wherein the second network is a cellular packet-switched network.

4. (Previously Presented) A method according to claim 3, wherein the cellular packet-switched network is a general packet radio service network.

5. (Previously Presented) A method according to claim 1, wherein the authentication message is an extensible authentication protocol message.

6. (Previously Presented) A method according to claim 5, wherein the extensible authentication protocol message is an extensible authentication protocol subscriber identity module or extensible authentication protocol authentication and key agreement message.

7. (Previously Presented) A method according to claim 5, wherein the authentication message is an extensible authentication protocol challenge response message.

8-11 (Cancelled)

12. (Currently Amended) An apparatus, comprising:

a processor configured to connect first and second distinct networks and extract from a received authentication message a service selection information to select a service,

wherein the authentication message signals the service selection information via the first

network to an authentication server of the second network,

wherein the processor is configured to use the service selection information to

establish a connection to services provided over an access point indicated by the service

selection information,

wherein the service selection information comprises at least one access point

name parameter,

wherein the processor is configured to select a gateway in the second network to

connect to the first network;

wherein the at least one access point name parameter comprises an access point

name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the

authentication message so that the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network

defined by the access point name.

13.   (Previously Presented) The apparatus according to claim 12, wherein the

received authentication message is based on an extensible authentication protocol.

14.   (Previously Presented) The apparatus according to claim 13, wherein the

received authentication message is an extensible authentication protocol challenge

response message.

15. (Previously Presented) The apparatus according to claim 12, wherein the processor is a standalone wireless local area network authentication server.

16. (Previously Presented) The apparatus according to claim 12, wherein the processor is a gateway general packet radio service support node.

17-18 (Cancelled)

19. (Previously Presented) The apparatus according to claim 12, wherein the at least one access point name parameter is decrypted in the processor.

20. (Previously Presented) The apparatus according to claim 12, wherein the at least one access point name parameter is forwarded by the processor to the access point in an encrypted manner.

21. (Currently Amended) An apparatus, comprising:

a processor configured to connect first and second distinct networks and to set, in an authentication message, a service selection[[,]] information regarding selection of a network service, wherein the authentication message signals the service selection information via the first network to an authentication server of the second network,

wherein the service selection information comprises at least one access point name parameter,

wherein the at least one access point name parameter comprises an access point name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the

authentication message so that said the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network

defined by the access point name,

wherein the access server is configured to select a gateway in the second network

to connect to the first network.

22.   (Previously Presented) The apparatus according to claim 21, wherein the

authentication message is an extensible authentication protocol message.

23.   (Previously Presented) The apparatus according to claim 22, wherein the

extensible authentication protocol message is an extensible authentication protocol

challenge response message.

24.   (Previously Presented) The apparatus according to claim 23, wherein the

extensible authentication protocol challenge response message is an extensible

authentication protocol subscriber identity module or extensible authentication protocol

authentication and key agreement challenge response message.

25.   (Cancelled)

26.   (Previously Presented) The apparatus according to claim 21, wherein the

service is a general packet radio service.

27.   (Currently Amended) A system, comprising:

a terminal device connected to a first network configured to provide access to a

network service, the terminal device configured to set, in an authentication message, a

service selection information regarding selection of the network service, wherein the

authentication message signals the service selection information via the first network to

an authentication server of a second network; and

an authentication server device connected to~~-a~~ the second network, the

authentication server device configured to provide an authentication mechanism, the

authentication server device configured to extract from a received authentication message

the service selection information to select the service, and to use the service selection

information to establish a connection to services provided over an access point indicated

by the service selection information, wherein the authentication server is configured to

select a gateway in the second network to connect to the first network,

wherein the service selection information comprises at least one access point

name parameter,

wherein the first and second networks are distinct,

wherein the at least one access point name parameter comprises an access point

name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the

authentication message so that the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network

defined by the access point name.

28.   (Currently Amended) A method, comprising:

extracting, by a processor coupled to a second network, from a received

authentication message received via a first network a service selection information to

select a service;

selecting, using the processor coupled to ~~the~~ second network, a gateway in the

second network to connect to the first network; and

using, by the processor coupled to the second network, the service selection

information to establish a connection to services provided over an access point indicated

by the service selection information,

wherein the service selection information comprises at least one access point

name parameter,

wherein the first and second networks are distinct,

wherein the at least one access point name parameter comprises an access point

name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the

authentication message so that the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network

defined by the access point name.

29.　　(Currently Amended) A method, comprising:

setting in an authentication message sent ~~from~~ via a first network to a second

network a service selection information regarding selection of a network service at a

terminal device,

selecting a gateway in the second network to connect to the first network;

wherein the service selection information comprises at least one access point name parameter,

wherein the first and second networks are distinct,

wherein the at least one access point name parameter comprises an access point name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the authentication message so that the access point name can be decrypted or read by an access server, and the user name and the password can only be decrypted at a network defined by the access point name.

30. (Currently Amended) A non-transitory computer-readable storage medium encoded with instructions configured to control a processor to perform a process, the process comprising:

using an authentication message to signal a service selection information via a first network to a second network, wherein the first and second networks are distinct;

using the service selection information to select a gateway in the second network to connect to the first network; and

using the service selection information to connect to services provided over an access point indicated by the service selection information,

wherein the service selection information comprises at least one access point name parameter,

wherein the at least one access point name parameter comprises an access point name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the

authentication message so that the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network

defined by the access point name.

31-32. (Cancelled)

33.   (Currently Amended) A non-transitory computer-readable storage medium

encoded with instructions configured to control a processor to perform a process, the

process comprising:

extracting, using a processor connected to a second network, from a received

authentication message from a first network, a service selection information to select a

service, wherein the authentication message signals the service selection information via

the first network to an authentication server of the second network;

selecting a gateway in the second network to connect to the first network, wherein

the first and second networks are distinct;

using the service selection information to establish a connection to services

provided over an access point indicated by the service selection information,

wherein the service selection information comprises at least one access point

name parameter,

wherein the at least one access point name parameter comprises an access point

name, a username, and a password, and

wherein the at least one access point name parameter is encrypted ins aid in said

authentication message so that the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network

defined by the access point name.

34.   (Currently Amended) A non-transitory computer-readable storage medium

encoded with instructions configured to control a processor to perform a process, the

process comprising:

setting in an authentication message a service selection information regarding

selection of a network service,

sending the authentication message from via a first network to an authentication

server coupled to a second network, wherein the first and second networks are distinct;

selecting a gateway in the second network to connect to the first network;

wherein the service selection information comprises at least one access point

name parameter,

wherein the at least one access point name parameter comprises an access point

name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the

authentication message so that the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network

defined by the access point name.

35-36   (Cancelled)

37.   (Previously Presented) The method according to claim 28, wherein the

received authentication message is based on an extensible authentication protocol.

38.   (Previously Presented) The method according to claim 37, wherein the received authentication message is an extensible authentication protocol challenge response message.

39-40. (Cancelled)

41.   (Previously Presented) The method according to claim 28, further comprising:

decrypting the at least one access point name parameter.

42.   (Previously Presented) The method according to claim 28, further comprising:

forwarding the at least one access point name parameter to the access point in an encrypted manner.

43.   (Previously Presented) The method according to claim 29, wherein the authentication message is an extensible authentication protocol message.

44.   (Previously Presented) The method according to claim 43, wherein the extensible authentication protocol message is an extensible authentication protocol challenge response message.

45.   (Previously Presented) The method according to claim 44, wherein the extensible authentication protocol challenge response message is an extensible

authentication protocol subscriber identity module or extensible authentication protocol

authentication and key agreement challenge response message.

46.   (Cancelled)

47.   (Previously Presented) The method according to claim 29, wherein the

service is a general packet radio service.

48.   (Currently Amended) An apparatus, comprising:

extracting means connected to a second network for extracting from a received

authentication message from a first network, a service selection information to select a

service, wherein the authentication message signals the service selection information via

the first network to an authentication server of the second network; and

controlling means for using the service selection information to establish a

connection to services provided over an access point indicated by the service selection

information, and for selecting a gateway in the second network to connect to the first

network, wherein the first and second networks are distinct,

wherein the service selection information comprises at least one access point

name parameter,

wherein the at least one access point name parameter comprises an access point

name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the

authentication message so that the access point name can be decrypted or read by an

access server, and the user name and the password can only be decrypted at a network defined by the access point name.

49.   (Currently Amended) An apparatus, comprising:

setting means for setting in an authentication message a service selection information regarding selection of a network service; and

sending means for sending the authentication message through a first network to a second network, wherein the first and second networks are distinct, wherein the authentication message is used by the second network to select a gateway in the second network to connect to the first network,

wherein the service selection information comprises at least one access point name parameter,

wherein the at least one access point name parameter comprises an access point name, a username, and a password, and

wherein the at least one access point name parameter is encrypted in the authentication message so that the access point name can be decrypted or read by an access server, and the user name and the password can only be decrypted at a network defined by the access point name.